

## SKYWAYS

# U.S. Maps Landings on Moon

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The National Aeronautics and Space Administration will be deciding shortly just how American astronauts will be landed on the moon in the Apollo program and it's a good guess it will be by some sort of transfer capsule rather than in the main spacecraft itself.

In other words, it appears the Apollo command module will not land, but continue to circle the moon in low orbit with one man aboard, while a small pressure capsule makes the descent with two astronauts.

In the basic Apollo concept, the main spacecraft is to make the landing on thrust provided by the lunar landing module. It would then become the launch pad (and remain on the moon) for Apollo's lift-off on the return flight to earth.

In this concept all three astronauts would make the lunar landing.

## Would Land Two

The lunar rendezvous technique would land two astronauts in a small pressure vessel for lunar exploration. Then they would launch back into moon orbit in this module and join with the main spacecraft in a docking maneuver before heading for earth.

We carried a brief note on this from Cape Canaveral and last week Charles Frick, Apollo project manager for NASA, acknowledged that the space agency has been studying this possibility.

If the lunar rendezvous technique is decided upon, it will not require any major revision in the Apollo spacecraft as currently planned. Frick said, but can be incorporated into the basic design.

## More Data Needed

There are advantages and disadvantages in both techniques and the trade-offs involved must be considered very carefully before a decision is made. It's possible NASA may go along both routes for a time until more data is available.

In the case of the lunar rendezvous operation, we'd like to know if the one astronaut who remains orbiting the moon in the main spacecraft would have any way of making an emergency landing to rescue his teammates in an emergency and if he could make the return flight to earth alone, if necessary.

There are some who feel only one man should make the descent, leaving two aloft, but this would appear extremely hazardous in view of the unknown factors involved.

Frick also told us Apollo lunar missions are being designed for 14 days, with a week "in the vicinity" of the moon. Heretofore, the figures have been 2½ days for the cislunar transfer, one day on the moon and 2½ days for the return flight.

The best book we've read in a long time is "The U-2 Affair" by two sharp Washington newspapermen, Tom Ross of the Chicago Sun-Times and Dave Wise of the New York Herald Tribune.

It's a fascinating story of the spy plane and pilot Gary Powers whose capture by the Russians wrecked a summit conference. But more particularly it's a story that goes behind the scenes into the high level conferences and the decisions that tangled the government into a beautiful target for Soviet spite and ridicule before the world.

The authors contend the United States all but made

it impossible for the summit meeting to take place by lying when it could have remained silent, by admitting it had lied, by disclaiming Presidential responsibility, then admitting Presidential responsibility, and finally by implying the flights would continue.

"To reverse the circumstances is to see the situation clearly," they point out. "If, on the eve of a summit meeting, Khrushchev had threatened to send his planes over New York or Chicago, could Eisenhower—or any other President—have agreed to sit down with him?"

## Powers' Trial

Although much of the book is given over to Gary Powers and his plane, the ill-timed flight on May 1, 1960, Powers' Moscow trial and the undercover arrangements for his return, the book's importance is in its consideration of questions that go far beyond these areas:

Why, for instance, was the flight ordered just 15 days before the summit meeting? Was it planned or coincidence?

Ross and Wise conclude the mission was directly related to the summit, but add there is no substantial evidence of any sort of a conspiracy to scuttle the meeting.

## One Last Photo

There was an uneasy feeling in intelligence circles, they explain, that an international rapprochement might be reached at Paris that would make further flights politically impossible for the foreseeable future. There was a strong desire to get one last photo to mission in, under the wire and the plane was sent despite the fact that there had been previous suspensions in the flight program during periods of international sensitivity.

The authors, who spent months digging into the strange and mysterious events surrounding the U-2 incident, claim that danger was inherent in the sky-spy operation from the start.

It was a compromise with traditional methods of espionage, they say, yet there is no evidence that the revolutionary implications of the operation were thought through. There was a tendency on the part of both policy makers and the intelligence men to avoid planning for the worst.

There was too much reliance on the technical means of destroying the evidence and not enough awareness of the chance of human or mechanical failure. There was a cover story but it did not cover all contingencies.

## Government Not Ready

"When disaster struck, the government was not ready, even though the program had been running for four years. As a result, it stumbled into a series of errors. In retrospect, the President realized the crisis had been badly handled."

The long-winged U-2, developed by Lockheed's chief designer, Clarence (Kelly) Johnson, had been expected to serve as a spy plane for perhaps a year. In four years of secret work it accomplished an amazing job and became mystically important to the government and the Central Intelligence Agency.

Its demise as an intelligence tool, the authors say, apparently was brought about by the near-miss explosion of a ground-to-air missile at 68,000 feet.

## Most Publicized Spy

And its pilot?

"The most publicized spy of the cold war, a man who flew as a vocation, not a dedication. But the work took courage even if the rewards were ample."

"When his mission failed, many jumped to the conclusion that he was a disloyal American. There was an attempt to make him a scapegoat for all that happened, including the mistakes of the highest officials of the government."

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